

**REMARKS**

Claims 10, 14-15, 45-51 and 54-58 are pending in this application. Claims 10, 51, 55 and 57 have been amended by the present Amendment. Amended claims 10, 51, 55 and 57 do not introduce any new subject matter.

**ALLOWABLE SUBJECT MATTER**

Applicants gratefully acknowledge the Examiner's indication that claims 45-50 are allowed.

**REJECTIONS UNDER 35 U.S.C. § 102 and § 103**

Reconsideration is respectfully requested of the rejection of claims 10, 15, 51, 56 and 58 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,034,725 ("Franklin").

Reconsideration is also respectfully requested of the rejection of (1) claims 10, 51 and 54 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,288,388 ("Zhang"); and (2) claim 14 under 35 U.S.C. § 103(a) as being unpatentable over Zhang as applied to claim 10, and further in view of U.S. Patent No. 5,777,355 ("Possin").

Claim 10, recites, *inter alia*, an inter-layer reaction layer formed on the wire and including at least  $Al_xSi_x$  or inter-metallic compound comprising Al. Similarly, claim 51 recites, *inter alia*, a second conductive layer sandwiched between the first wire and the first conductive layer and containing  $Al_xSi_x$  or inter-metallic compound comprising Al.

In the rejections of claim 10 and 51, the Examiner maintains that Franklin discloses an inter-layer reaction layer including at least silicon, and that Zhang discloses an inter-layer reaction layer including at least silicon.

However, in contrast to the claimed embodiments, neither Franklin nor Zhang

disclose an inter-layer reaction layer or a second conductive layer including at least  $\text{Al}_x\text{Si}_x$  or inter-metallic compound comprising Al. Indeed, the Examiner states that the cited art fails to disclose Al Si.

Further, Possin does not cure the deficiency in Franklin or Zhang.

Accordingly, neither Franklin nor Zhang anticipate an inter-layer reaction layer or a second conductive layer including at least  $\text{Al}_x\text{Si}_x$  or inter-metallic compound comprising Al, as recited in independent claims 10 and 51. Further, an inter-layer reaction layer including at least  $\text{Al}_x\text{Si}_x$  or inter-metallic compound comprising Al is not rendered obvious by the combination of Zhang and Possin.

Applicants note that in addition to the above distinctions, Franklin also fails to disclose a conductive layer directly connected to the wire via the inter-layer reaction layer, as recited in claim 10, and the first conductive layer directly connected to the first wire via the second conductive layer, as recited in claim 51. The Examiner maintains that "a conductive layer 12 [is] directly connected to the wire via the inter-layer reaction layer 10". However, in contrast to the Examiner's conclusions, the common connection 12 and the barrier layer 10 in Franklin are not connected to each other.

Therefore, Applicants respectfully submit that Franklin or Zhang, when taken alone or in combination with Possin do not teach or suggest the limitations of claims 10 and 51, and do not anticipate or render obvious same. For at least the reason that claims 14-15 and 56 depend from claim 10, and claims 54 and 58 depend from claim 51, claims 14-15, 54, 56 and 58 are also submitted to be patentable over and/or not to be anticipated by the cited references.

As such, Applicants respectfully request that the Examiner withdraw the

rejections of claims 10, 14-15, 51, 54, 56 and 58 under 35 U.S.C. § 102 and § 103.

**OBJECTION TO CLAIMS 55 and 57**

The Examiner objects to claims 55 and 57 because claims 55 and 57 "lack proper antecedent basis".

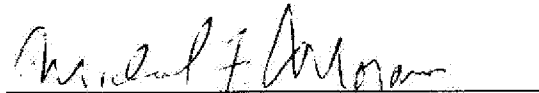
In accordance with the Examiner's suggestion, Applicants have amended claims 55 and 57 to specifically claim  $Al_xSi_x$ . Therefore, Applicants respectfully request that the objection to claims 55 and 57 be withdrawn.

**AMENDMENTS TO THE SPECIFICATION**

Applicants have amended the specification at pages 13 and 22 to state that "x" in  $Al_xSi_x$  "is an integer, and can be the same or a different value for Al and Si, respectively". Applicants respectfully submit that the amendment to the specification clarifies what has been already been disclosed, and does not constitute new matter.

An early and favorable reconsideration is earnestly solicited. If the Examiner has any further questions or comments, the Examiner may telephone Applicants' Attorney to reach a prompt disposition of this application.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Michael F. Morano", is written over a horizontal line.

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